

Op Amp Single Low Power Amplifier R-R I/O $\pm 3V/6V$ 8-Pin PDIP Tube

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: DIP8

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free RoHS

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The TLV246x is a family of low-power rail-to-rail input/output operational amplifiers specifically designed for portable applications. The input common-mode voltage range extends beyond the supply rails for maximum dynamic range in low-voltage systems. The amplifier output has rail-to-rail performance with high-output-drive capability, solving one of the limitations of older rail-to-rail input/output operational amplifiers. This rail-to-rail dynamic range and high output drive make the TLV246x ideal for buffering analog-to-digital converters.

The operational amplifier has 6.4 MHz of bandwidth and 1.6 V/ μ s of slew rate with only 500 μ A of supply current, providing good ac performance with low power consumption. Three members of the family offer a shutdown terminal, which places the amplifier in an ultralow supply current mode (IDD= 0.3 μ A/ch). While in shutdown, the operational-amplifier output is placed in a high-impedance state. DC applications are also well served with an input noise voltage of 11 nV/Hz and input offset voltage of 100 μ V.

This family is available in the low-profile SOT23, MSOP, and TSSOP packages. The TLV2460 is the first rail-to-rail input/output operational amplifier with shutdown available in the 6-pin SOT23, making it perfect for high-density circuits. The family is specified over an expanded temperature range ($T_A = -40^{\circ}$ C to 125°C) for use in industrial control and automotive systems, and over the military temperature range ($T_A = -55^{\circ}$ C to 125°C) for use in military systems.

Key Features

Rail-to-Rail Output Swing

Gain Bandwidth Product...6.4 MHz

±80 mA Output Drive Capability

Supply Current...500 µA/channel

Input Offset Voltage...100 μV

Input Noise Voltage...11 nV/Hz

Slew Rate...1.6 V/us

Micropower Shutdown Mode (TLV2460/3/5)...0.3µA/Channel

Universal Operational Amplifier EVM

Available in Q-Temp Automotive HighRel Automotive Applications Configuration Control/Print Support Qualification to Automotive Standards

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Recommended For You

TLC27M2CP	TLV3501AIDR	TL071ACP
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP8	SOP8	DIP-8
TL062CDR	TLF2142IP	TLC272AID
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP8	DIP8	SOP-8
TLV3502AQDCNRQ1	TL084CD	TLV271IDBVR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOT23-8	SOP14	SOT23-5

TLC074CD

TLV2462ID

Texas Instruments, Inc

SOP14

TLC2272ACD

Texas Instruments, Inc

SOP-8

TLV2381IDBVR

SOP8

TLC2272AIDR

Texas Instruments, Inc

Texas Instruments, Inc

SOP-8

Texas Instruments, Inc

TLV2471QDBVRQ1

SOT23-5

Texas Instruments, Inc

SOT23-5